NAME OF WORK : IMPROVEMENTS OF ROADS AND DRAINS AT KENCHENAHALLI VILLAGE IN WARD NO.02 OF YELAHANKA SUB-DIVISION

Estimate Cost Rs. 25.00 Lakhs

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
1	Removing **B.S. slab** of Drain and stacking.(P No.25 / I N 5.32)								
	for Drain	Sqm							
	1st Main Road		2	80.00	1.20		192.00		
			2	120.00	0.75		180.00		
	Main Road		2	150.00	1.20		360.00		
	Railway II Road		1	70.00	0.60		42.00		
	Cross Road		2	90.00	0.90		162.00		
			2	60.00	0.75		90.00		
							1026.00	65.72	**67428.72**
	Basic Rate	62.00							
	Area Weightage @ 6%	3.72							
	Total	**65.72**							
2	KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH Chapter 3 (P.142/I.19.1)								
	Desilting for Drain	Cum							
	1st Main Road		2	80.00	0.60	0.90	86.40		
			2	120.00	0.60	0.65	93.60		
	Main Road		2	150.00	0.60	0.60	108.00		
	Railway II Road		1	70.00	0.60	0.80	33.60		
			2	90.00	0.60	0.60	64.80		
			2	60.00	0.60	0.80	57.60		
							444.00	86.92	**38592.48**
	Basic Rate	82.00							
	Area Weightage @ 6%	4.92							
	Total	**86.92**							
3	**Refixing stone slabs** of drains and pointing in C.M.(1:3)(P.No.25/I.No.5.33)								
		Sqm							
				70% of Qty Vide Item No.1			**718.20**	80.56	**57858.19**
	Basic Rate	76.00							
	Area Weightage @ 6%	4.56							
	Total	**80.56**							
4	Providing and fixing **RCC precast Slabs of 0.10 m thick of CC 1:2:4 with 20 mm** and down size graded granite metal , machine mixed , including cost of all material , labour , HOM of Machinery , curing complete								
		Sqm							
				30% of Qty Vide Item No.1			**307.80**	2100.00	**646380.00**
	Data Rate	**2100.00**							

P.T.O

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
5	KSRB 2-1.1 : Earthwork in surface excavation in **ordinary soil** for **levelling and lowering** ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1 (a) / 2.3.1 (P.5/I.2.1)								
		Cum							
	Railway Parallel Road		1	170.00	1.20	0.30	61.20		
			1	25.00	6.00	0.30	45.00		
	1st Main		1	80.00	0.90	0.30	72.00		
							178.20	166.42	**29656.04**
	Basic Rate	157.00							
	Area Weightage @ 6%	9.42							
	Total	**166.42**							
6	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregate /sand/kaner/ Moorum KSRRB M100-1 Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications MORTH -100/ Chapter 1 (Page No.133/ Item No 17.1)								
		Cum							
				Qty Vide Item No.2+5			**622.20**	100.00	**62220.00**
	Average Weight of Earth 1.28 Tonne/Km								
	Basic Rate Lead Charges for 10.00 Kms (2.50X1.28X10.00)	32.00							
	Add loading and unloading Item No 17.1)	68.00							
	Total	**100.00**							
7	KSRB 4-1.7 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs with 20mm and down size graded granite metal coarse aggregate @ 0.84cum and fine aggregate @ 0.56 cum machine mixed concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1.4.2.(P No. 13 / Item No.4.7)								
		Cum							
	for Drain, coping		2	80.00	0.15	0.10	2.40		
	packing concrete		2	150.00	0.15	0.10	4.50		
							6.90	5704.56	**39361.46**
	Basic Rate	5282.00							
	Area Weightage @ 8 %	422.56							
	Total	**5704.56**							
8	**Cleaning the existing black topped surface** with brooms, soft brushes and finally dusting with old gunny bags and /or compressed air to recieve bituminous treatment including cost of all materials, labour, HOM of machineries complete as per Specifications. (P.No.157 & I.No.21.2)								
		Sqm							
	Railway Parallel Road		1	100.00	4.20		420.00		
			1	70.00	6.00		420.00		
			1	25.00	10.00		250.00		
	1st Main Road		1	80.00	6.90		552.00		
	Kenchena halli Main Road		1	100.00	6.40		640.00		

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No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
			1	85.00	6.00		510.00		
				Deduct Road cut portions			-647.40		
							2144.60	3.18	**6819.83**
	Basic Rate	3.00							
	Area Weightage @ 6%	0.18							
	Total	**3.18**							
9	KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material (P.No.155 It.No.20.4.2)								
		Cum							
	Railway Parallel Road		1	170.00	1.20	0.15	30.60		
			1	25.00	6.00	0.15	22.50		
	1st Main Road		1	80.00	0.90	0.15	10.80		
							63.90	1665.26	**106410.11**
	Basic Rate	1571.00							
	Area Weightage @ 6%	94.26							
	Total	**1665.26**							
10	KSRRB M400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P.No.158 I.No.20.18)								
		Cum							
	Railway Parallel Road		1	170.00	1.20	0.20	40.80		
			1	25.00	6.00	0.20	30.00		
			1	80.00	0.90	0.20	14.40		
	Potholes		35	1.20	1.20	0.15	7.56		
			40	1.50	1.20	0.15	10.80		
			25	2.20	1.80	0.15	14.85		
							118.41	1768.08	**209358.35**
	Basic Rate	1668.00							
	Area Weightage @ 6%	100.08							
	Total	**1768.08**							
11	Providing and applying primer coat with ss bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specifications. MORTH Specification No.502 (P.No.160/It No.21.6)								
		Cum							
	Railway Parallel Road		1	170.00	1.20		204.00		
			1	25.00	6.00		150.00		
			1	80.00	0.90		72.00		
			35	1.20	1.20		50.40		

P.T.O

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
			40	1.50	1.20		72.00		
			25	2.20	1.80		99.00		
							647.40	27.56	**17842.34**
	Basic Rate	26.00							
	Area Weightage @ 6%	1.56							
	Total	**27.56**							
12	KSRRB M500- 15. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No.507 (P.No.162&163 It.No.21.17.6)								
		Cum							
	Railway Parallel Road		1	170.00	1.20	0.050	10.20		
			1	25.00	6.00	0.050	7.50		
			1	80.00	0.90	0.050	3.60		
			35	1.20	1.20	0.050	2.52		
			40	1.50	1.20	0.050	3.60		
			25	2.20	1.80	0.050	4.95		
	profile correction	15% of Qty Vide Item No.11			321.69	0.050	16.08		
							48.45	6435.26	**311817.31**
	Basic Rate	6071.00							
	Area Weightage @ 6%	364.26							
	Total	**6435.26**							
13	KSRRB 500-7:Providing and **applying tack coat with bitumen emulsion** using 80/100 grade bitumen (VG20) on the prepared black toped suface at 2.5kg per 10 sqm, heating bitumen in boiler fitted with spray set (Excluding cleaning of road surface) including cost of all materials, labour, HOM of Machineries complete as per Specifications.(P.No.160 & I.No.21.7)								
		Sqm							
	Railway Parallel Road		1	100.00	4.20		420.00		
			1	70.00	6.00		420.00		
			1	25.00	10.00		250.00		
	1st Main Road		1	80.00	6.90		552.00		
	Kenchenahalli Main Road		1	100.00	6.40		640.00		
			1	85.00	6.00		510.00		
							2792.00	14.84	**41433.28**
	Basic Rate	14.00							
	Area Weightage @ 6%	0.84							
	Total	**14.84**							

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Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
14	KSRRB M500- 15. Providing, laying bituminousConcrete using 40/60 THP pacity H.M.P with Mechanical paver Gr-II (30mm to 45mm), crushed aggregates of specified grading premixed with 6% VG 30 grade bituminous bi er and , transporting the hot mix to work site , laying to the required level and grade,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH Specification clause No.500.9 complete in all respects complete as per specifications MORTH Specification No.509 (P.No.164 Item No.21.22.6)								
		Cum							
	Railway Parallel Road		1	100.00	4.20	0.040	16.80		
			1	70.00	6.00	0.040	16.80		
			1	25.00	10.00	0.040	10.00		
	1st Main Road		1	80.00	6.90	0.040	22.08		
	Kenchenahalli Main Road		1	100.00	6.40	0.040	25.60		
			1	85.00	6.00	0.040	20.40		
							111.68	7270.54	**811973.91**
	Basic Rate	6859.00							
	Area Weightage @ 6%	411.54							
	Total	**7270.54**							
15	KSRRB M800-13: Road marking with hot applied thermoplastic compound with reflect rising glass beads on bituminous surface- providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface to level, uniform and free from streaks and holes complete as per specifications. MORTH specification No. 803, No. 1974 (P.No.181 & I.No.24.15)								
		Sqm							
			2.5	450	0.10		112.50		
							112.50	464.28	**52231.50**
	Basic Rate	438.00							
	Area Weightage @ 6%	26.28							
	Total	**464.28**							
16	Miscellaneous and unforeseen charges	LS							616.47
							Grand Total Amount		2500000.00

(Rupees Twenty Five Lakhs Only)

1) The site has been inspected and the work is found to be necessary.
2) The rates adopted are as per PW,P IWTD SR of 2016-17 and data rate of Bangalore Circle.
3) The provisions were made in this estimate are necessary and adequate.
4) The area comes under the Bruhat Bengaluru Mahanagara Palike Limits.

Assistant Engineer
Ward No.02

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

Executive Engineer
Yelahanka Division
B.B.M.P

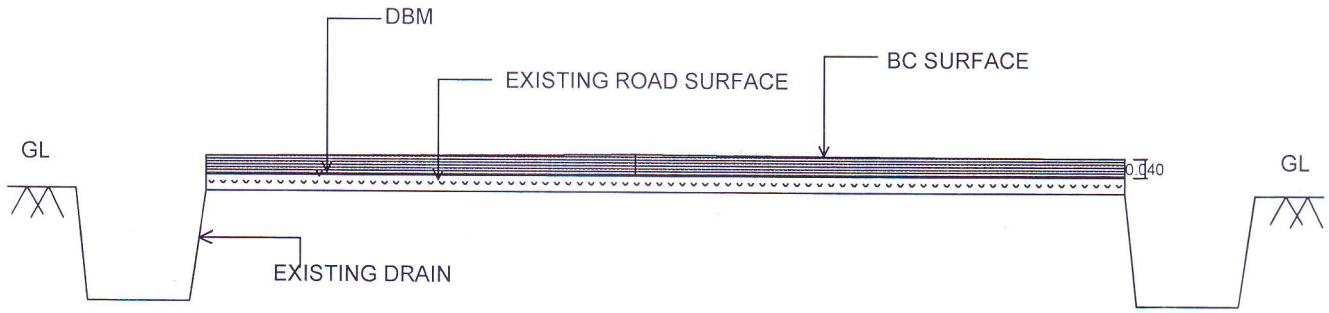
Administrative Approval
Accorded For 25.00 lakh Rs
Head of A/C P1771
CER NO : 182 Dt:. 16.2.17

TA CE (YNK),

Technical Sanction
Accorded For 25.00 lakh Rs
Head of A/C P1771
CER NO : 135 Dt:. 16.2.17

TA CE (YNK)

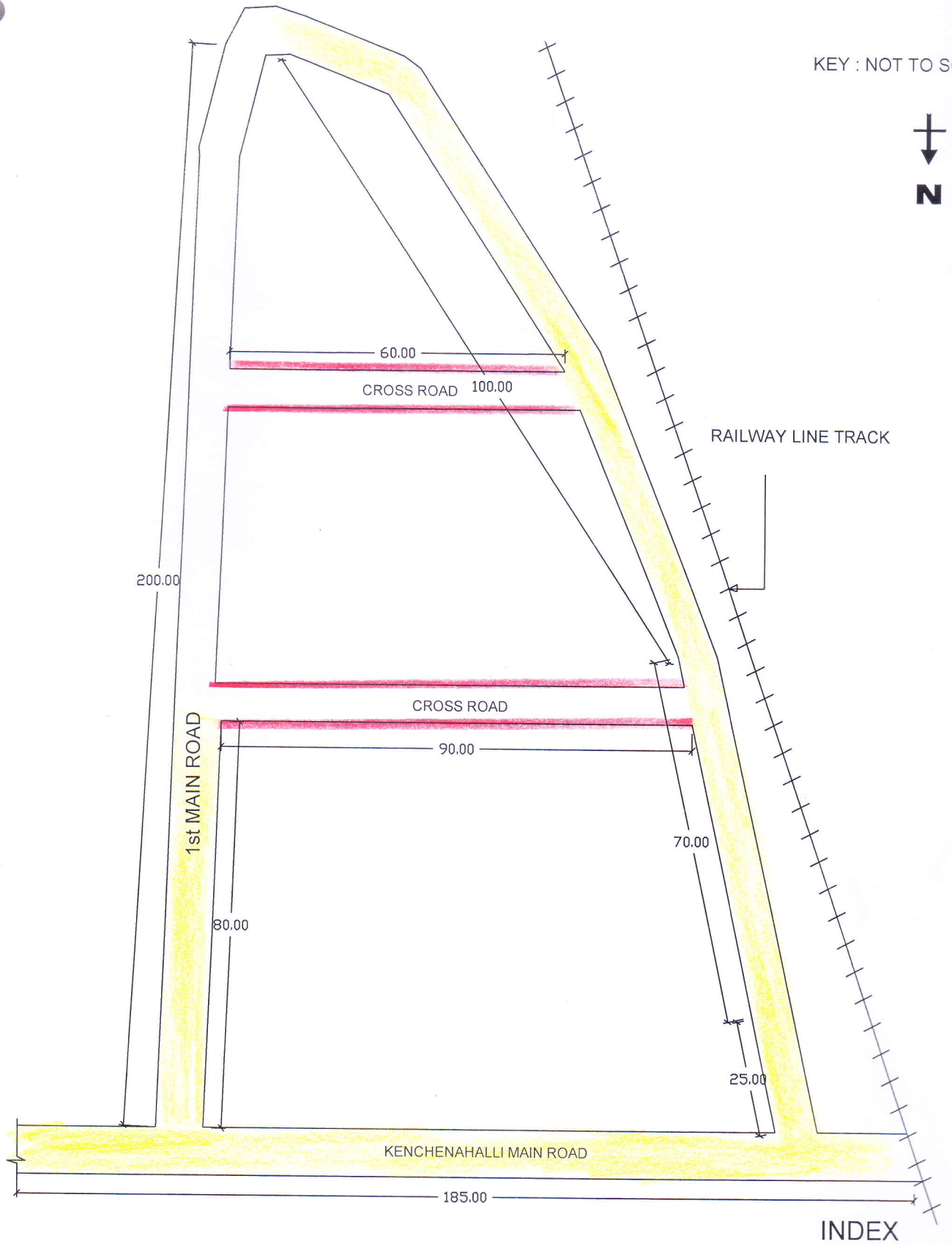
NAME OF WORK : IMPROVEMENTS OF ROADS AND DRAINS AT KENCHENAHALLI VILLAGE IN WARD NO.02 OF YELAHANKA SUB-DIVISION



TYPICAL CROSS SECTION OF ASPHALT ROAD

Asst. Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Yelahanka, Bangalore

NAME OF WORK : IMPROVEMENTS OF ROADS AND DRAINS AT KENCHENAHALLI VILLAGE IN WARD NO.02 OF YELAHANKA SUB-DIVISION



Assistant Engineer
Ward No.02
B.B.M.P

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

LAHANKA ZONE
ARD 2-CHOWDESHWARI WARD

No of Properties :	6035
	108
	18
	156
	16
	1737
	2
	207
	2352
	397
	1020
	22
No of Roads :	490
	10
	2
	478
Total Length of Roads (In Meters)-	73583.59
	2633.3

AE

Asst. Executive Engineer
Yelahanka Sub. Divison
(BBMP Ynk. Zn)
Yelahanka, Bangalore